

SVKM's
D. J. Sanghvi College of Engineering

Program: B.Tech (All Programs)

Academic Year: 2022

Duration: 3 hours

Date: 04.01.2023

Time: 10:30 am to 01:30 pm

Subject: Research Methodology (Semester VII)

Marks: 75

Instructions: Candidates should read carefully the instructions printed on the question paper and on the cover page of the Answer Book, which is provided for their use.

- (1) This question paper contains one page.
- (2) **All Questions are Compulsory.**
- (3) All questions carry equal marks.
- (4) **Answer to each new question is to be started on a fresh page.**
- (5) **Figures in the brackets on the right indicate full marks.**
- (6) **Assume suitable data wherever required, but justify it.**
- (7) Draw the neat labelled diagrams, wherever necessary.

Question No.		Max. Marks
Q1 (a)	Explain the various elements associated with technical report writing.	[10]
Q1 (b)	i. Explain probability sampling with an example. OR ii. Explain non probability sampling with an example.	[05] [05]
Q2 (a)	i. Explain the need for research design. OR ii. Explain with an example independent and dependent variable.	[05] [05]
Q2 (b)	Explain the importance of conducting the literature review. Also explain the key factors to be considered while conducting the literature review.	[10]
Q3 (a)	i. Explain experimental hypothesis test research. OR ii. Explain non experimental hypothesis testing research.	[05] [05]
Q3 (b)	Explain the need for data collection. Also explain primary and secondary data with examples.	[10]
Q4 (a)	i. Explain the need for data interpretation. OR ii. Explain quota sampling with an example.	[05] [05]
Q4 (b)	Explain in detail the various elements associated with research design.	[10]
Q5 (a)	i. Differentiate between research method and research methodology. OR ii. Explain stratified sampling with an example.	[05] [05]
Q5 (b)	Explain quantitative and qualitative research approaches in detail.	[10]